

the other males who display female wings. In another series of experiments the wings were cut entirely off of both males and females, and also all of the scales were brushed off their bodies; and yet these shabby looking males were readily accepted by normal females, nor could I see that normal males displayed any aversion to mating with the wingless females. We are, therefore, forced to conclude that the melanic coloration of the male has not been brought about through the agency of sexual selection on the part of the female. In this connection it is interesting to notice that Plateau, 1897, concludes that insects are attracted only by the odor of flowers and not at all by their color.

In conclusion it gives me great pleasure to express my gratitude to Miss Caroline G. Soule for advice and aid; to W. L. Tower Esq. for his kindness in collecting many cocoons of the moth; and to Dr. Robert W. Fuller who provided me with reagents used in the manufacture of ethyl mercaptan.

*Summary of Conclusions.*—The male is positively chemotactic toward some substance which emanates from the abdomen of the female, and which he perceives through olfactory organs situated upon his antennae.

ENTOMOLOGY FOR THE YOUNG.—Ginn and Co. of Boston have just issued a second series of *Stories of Insect Life*, by Mary E. Murtfeldt and Clarence Moores Weed, intended for children. It is a little reading book of 72 pages, well illustrated, and in its few chapters ranges a wide field.

Females 30–60 hours old are much more attractive to males than are young females 5–10 hours old. Virgin females are somewhat more attractive than are fertilized ones of the same age.

The male will mate at least four times either with the same or with different females.

Neither males nor females pay any attention to the appearance of their partners. The melanic colors of the male have not been brought about through sexual selection on the part of the female.

#### LITERATURE QUOTED.

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*Harvard University,*  
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A considerable portion of Blatchley's *Gleanings from Nature* (The Nature Publishing Co., Indianapolis), intended to awaken an interest in nature in the youth of Indiana particularly, is devoted to insects and especially to Orthoptera. A good many interesting facts may be found in it.